### **Common Sense Initiative, Automobile Manufacturing Sector**

U.S. Automobile Assembly Plants and Their Communities: Environmental Economic, and Demographic Profile

# Part III: Automobile/Light Duty Truck Assembly Plant-Community Profiles

10. Subaru-Isuzu Lafayette, IN

December 1997

#### **Contents and Guidelines for Use**

Users of this profile should carefully review the description of methods, data limitations, and guidelines for use and interpretation of the data presented in Part I of the report.

#### **Contents:**

Plant Locations (National and Michigan maps)

Plant Location, Database Identification Numbers, 1994 Production and Employment

1991 and 1993 RCRA Biennial Report Summary

1991-1994 TRI Releases and Transfers Summary

1994 TRI Releases and Transfers by Chemical

1991-1994 Volatile Organic Compound and Nitrogen Oxide Emissions

1994 Summary of TRI Chemical Releases and Transfers from Sources within 3 Miles of Assembly Plant

Air Quality Attainment Status for Criteria Pollutants (as of 1994)

Community Demographic and Economic Characteristics

Facility Location (map)

Area Wide 1994 TRI Emission Profile (map)

1994 TRI Releases and Transfers from Sources within 3 Miles of Assembly Plant, by Chemical

Demographic Characteristics (maps)

#### **General Guidelines for Use**

Efforts have been made to ensure that the data presented here are accurate. The Project Team could not independently verify data accuracy in all cases, however, and some errors may remain. The following is a partial list of factors that should be considered in using these profiles:

- 1. Current releases presented in this report represent only some of the contamination sources in a given area. Data on historical releases (prior to 1991) were not included, and releases from non-assembly plant emission sources were identified only through the Toxics Release Inventory (TRI). TRI data do not cover all sources of releases. Considering only TRI data for a given community may mis-state the relative contribution of plants and their neighboring TRI facilities to an area's total releases.
- 2. Care must be taken to distinguish true changes over time in environmental releases from apparent changes, due, for example, to changes in the scope of reporting requirements.
- 3. TRI data are often based on engineering estimates and are reported on an annual basis. Data on releases over shorter time frames are not available.
- 4. TRI, the Biennial Report and other databases do not include all substances and environmental releases of concern.

#### **Notes on Comparisons Across Facilities**

- 1. The following factors can affect an assembly plant's environmental profile, among other things: the number of vehicles produced, plant age, process equipment age, and vehicle size and configuration.
- 2. Some plants are highly-integrated, performing some parts and all assembly steps in-house. Others obtain parts from other manufacturing facilities, or share assembly operations with another plant.
- 3. States differ in how they define hazardous waste and how they treat recycled wastes and small quantity generators. Therefore, data on quantities of BRS wastes generated may not be comparable for plants located in different states.
- 4. Area-wide averages for economic and demographic characteristics may be better or worse measures of the plant's immediate community, depending on the specific location of a plant within the reporting area.

CATION	Address Lat/Long:	5500 State Rd. 38 East, La latitude (degrees N)	afayette IN 479	05 40 22' 53"	DESCRIPTION	,	joint venture of Subaru and Isuzu in 1989; in 1992 Produced Honda Passport, Rodeo,
	Lat/Lung.	longitude (degrees W)		86 47' 30"		, ,	and Isuzu pickup in 1994.
	County:	Tippecanoe MSA:		Lafayette IN		oubara Logacy (	and iouzu pionup in 100 ii
	Other counti	es within 3 miles of plant:		none	ID NUMBERS	RCRA ID AIRS ID	IND 984866491 AFS1815700050
PERATIONS		Production	Employment	t		NPDES ID TRI	IN0053996 47903SBRSZ5500S
Calendar Year: 1991		116,297					
1992	!	124,020					
1993	1	124,004					
1994	ļ	154,801	1,970				

#### PLANT ENVIRONMENTAL PROFILE

RA BIENNIAL REPORT								
<b>Waste Code(s)</b> 1991	Wastewater?	Physical Form	Source	Mgd. On/Off-Site	Management Method	Quantity Generated (tons)	Quantity Shipped (tons)	Quantity Mgd. On-Site (tons)
D001 (ignitable)	N	B203 org. liquids	A59 1x/intermittent	Off	M061 fuel blending	0.2	0.2	0.0
D001 (ignitable)	N	B210 org. liquids	A09 clean out equip	Off	M041 incineration	14.5	14.5	0.0
D001 (ignitable)	N	B210 org. liquids	A09 clean out equip	Off	M041 incineration	38.8	38.8	0.0
D001 (ignitable)	N	B211 org. liquids	A07 vapor degreas	Off	M021 solvents recov.	2.1	2.1	0.0
D001 (ignitable)	N	B409 org. solids	A08 physical scraping	Off	M043 incineration	15.5	15.5	0.0
D001 (ignitable)	N	B604 org. sludges	A21 painting	Off	M042 incineration	51.9	51.9	0.0
D001(ignit) F003 (solvents)	N	B211 org. liquids	A09 clean out equip	Off	M061 fuel blending	727.4	727.4	0.0
D001(ignit) F003 (solvents)	N	B211 org. liquids	A21 painting	Off	M061 fuel blending	45.1	45.1	0.0
D001, D009	N	B001 lab packs	A57 1x/intermittent	Off	M041 incineration	2.0	2.0	0.0
D002 (corrosive)	N	B519 inorg. sludges	A24 phosphating	Off	M041 incineration	20.4	20.4	0.0
D006, D007, D008	N	B106 inorg. liquids	A03 caustic cleaning	Off	M021 solvents recov.	0.0	0.0	0.0
D008 (lead)	N	B604 org. sludges	A21 painting	Off	M042 incineration	16.6	16.6	0.0
D018 (benzene)	N	B211 org. liquids	A59 1x/intermittent	Off	M021 solvents recov.	2.0	2.0	0.0
F001 (halog. solvents)	N	B202 org. liquids	A07 vapor degreas	Off	M021 solvents recov.	7.1	7.1	0.0
TOTAL - 19:	91					943.5	943.5	0.0

<b>Waste Code(s)</b> 1993	Wastewater?	Physical Form	Source	Mgd. On/Off-Site	Management Method	Quantity Generated (tons)	Quantity Shipped (tons)	Quantity Mgd. On-Site (tons)	
D001 (ignitable)	N	B210 org. liquid	A09 clean out equip	Off	M043 incineration	19.2	19.2	0.0	
D001 (ignitable)	N	B211org. liquid	A05 dip rinsing	Off	M021 solvents recov.	1.2	1.2	0.0	
D001 (ignitable)	N	B211org. liquid	A19 other clean/degr.	Off	M042 incineration	7.6	7.6	0.0	
D001 (ignitable)	N	B604 org. sludges	A21 painting	Off	M042 incineration	6.6	6.6	0.0	
D001(ignitable) D018 (benzene)	N	B203 org. liquid	A61 remediation	Off	M051 energy recov.	0.1	0.1	0.0	
D001(ignitable) D018 (benzene)	N	B409 org. solids	A53 1x/intermittent	Off	M043 incineration	0.1	0.1	0.0	
D001(ignitable) F003 (solvents)	N	B211org. liquid	A73 solvents recovery	Off	M041 incineration	4.2	4.2	0.0	
D001(ignitable) F003 (solvents)	N	B211org. liquid	A73 solvents recovery	Off	M061 fuel blending	117.0	117.0	0.0	
D001(ignitable) F003 (solvents)	N	B409 org. solids	A08 physical scraping	Off	M043 incineration	9.5	9.5	0.0	
D001, D009, D006	N	B003 lab packs	A57 1x/intermittent	Off	M111 stabilization	0.7	0.7	0.0	
D001, D035, F003	N	B211org. liquid	A09 clean out equip	Off	M022 solvents recov.	678.5	678.5	0.0	
D001, U154	N	B203 org. liquid	A58 1x/intermittent	Off	M041 incineration	1.2	1.2	0.0	
D002 (corrosive)	N	B319 inorg. solids	A53 1x/intermittent	Off	M043 incineration	0.1	0.1	0.0	
D002 (corrosive)	N	B519 inorg sludges	A24 phosphating	Off	M042 incineration	17.0	17.0	0.0	
D008 (lead)	N	B406 org. solids	A21 painting	Off	M043 incineration	22.1	22.1	0.0	
D008 (lead)	N	B604 org. sludges	A21 painting	Off	M042 incineration	4.4	4.4	0.0	
F001 (halog. solvents)	N	B202 org. liquid	A07 vapor degreas	Off	M022 solvents recov.	4.0	4.0	0.0	
F001 (halog. solvents)	N	B202 org. liquid	A07 vapor degreas	Off	M041 incineration	0.5	0.5	0.0	
U122	N	B409 org. solids	A53 1x/intermittent	Off	M043 incineration	0.9	0.9	0.0	
TOTAL - 1993						894.6	894.6	0.0	
TOXICS RELEASE INVENTORY									
	Air-Fugitive	Air-Stack	Total	Discharge	Off-Site	Off-Site	Off-Site	Off-Site	Total
Total lbs of TRI chemicals:	Emissions	Emissions	Releases	to POTW	Energy Recovery	Recycling	Treatment	Disposal	Transfers
1991	28,925	610,440	639,365	5	1,386,400	12,800	5,450	0	1,404,655
1992	9,025	736,765	745,790	40	390,100	9,500	6,600	0	406,240
1993	10,215	622,505	632,720	1,040	138,780	870,005	27,840	5	1,037,670
1994	10,395	981,645	992,040	1,040	136,850	684,000	71,600	0	893,490
Lbs. per vehicle produced:									
1991	0.25	5.25	5.50	0.00	11.92	2 0.11	0.05	0.00	12.08
1992	0.07	5.94	6.01	0.00	3.15	0.08	0.05	0.00	3.28
1993	0.08	5.02	5.10	0.01	1.12	7.02	0.22	0.00	8.37
1994	0.07	6.34	6.41	0.01	0.88	3 4.42	0.46	0.00	5.77

#### PLANT ENVIRONMENTAL PROFILE (continued)

#### 1994 TRI Emissions/Releases by Chemical (lbs.)

	Air-Fugitive	Air-Stack	Total	Discharge	Off-Site	Off-Site	Off-Site	Off-Site	Total
Chemical Name	Emissions	Emissions	Releases	to POTW	Energy Recovery	Recycling	Treatment	Disposal	Transfers
METHANOL	750	69,000	69,750	5	11,000	5,800	1,800	0	18,605
N-BUTYL ALCOHOL	1,400	140,000	141,400	5	14,000	35,000	1,000	0	50,005
BENZENE	5	250	255	0	250	0	250	0	500
1,1,1-TRICHLOROETHANE	250	5,500	5,750	0	0	19,000	0	0	19,000
METHYL ETHYL KETONE	250	2,000	2,250	5	5,400	4,700	9,600	0	19,705
1,2,4-TRIMETHYLBENZENE	250	25,000	25,250	0	14,000	3,700	250	0	17,950
ETHYLBENZENE	250	11,000	11,250	0	8,100	0	250	0	8,350
STYRENE	5	250	255	0	250	0	250	0	500
ETHYLENE GLYCOL	0	0	0	5	20,000	0	1,400	0	21,405
METHYL ISOBUTYL KETONE	1,500	150,000	151,500	5	3,400	150,000	550	0	153,955
TOLUENE	750	89,000	89,750	0	12,000	5,800	1,300	0	19,100
CYCLOHEXANE	5	250	255	0	250	0	250	0	500
XYLENE (MIXED ISOMERS)	4,200	420,000	424,200	5	40,000	440,000	4,500	0	484,505
METHYL TERT-BUTYL ETHER	5	250	255	0	750	0	250	0	1,000
HYDROCHLORIC ACID	5	0	5	0	0	0	10,750	0	10,750
PHOSPHORIC ACID	5	0	5	0	0	0	17,000	0	17,000
SULFURIC ACID	5	0	5	0	0	0	250	0	250
BARIUM COMPOUNDS	0	1,500	1,500	250	250	0	250	0	750
GLYCOL ETHERS	750	67,000	67,750	5	7,200	20,000	750	0	27,955
LEAD COMPOUNDS	5	0	5	250	0	0	1,500	0	1,750
MANGANESE COMPOUNDS	5	390	395	250	0	0	1,700	0	1,950
NICKEL COMPOUNDS	0	5	5	250	0	0	1,950	0	2,200
ZINC COMPOUNDS	0	250	250	5	0	0	15,800	0	15,805
TOTAL	10,395	981,645	992,040	1,040	136,850	684,000	71,600	0	893,490
VOC/NOx Emissions:									
(lbs/year)	VOCs	NOx*							
1990	NA	NA							
1991	NA	NA							
1992	NA	NA							
1993	2,803,200	100,600							
1994	2,056,511	112,840							
		*1994 - NO2							

#### **COMMUNITY ENVIRONMENTAL PROFILE**

TRI Chemical Releases & Transfers from Sources Within 3 Miles of Auto/LDT Plant (lbs.)

Facility (w. map #)	Air-Fugitive	Air-Stack	Total	Discharge	Off-Site	Total
	Emissions	Emissions	Releases	to POTW	Transfers	Transfers
2 A. E. STALEY MFG. CO. LAFAYETTE <i>Total</i>	15	1,041	1,056	0	0	0
	<b>15</b>	<b>1,041</b>	<b>1,056</b>	<b>0</b>	<b>0</b>	<b>0</b>

Air Quality Attainment Status (as of 1994)\*

ozone - attainment or unclassifiable carbon monoxide - attainment or unclassifiable

particulates - unclassifiable lead - unclassifiable

NO2 - cannot be classified or better than national standards

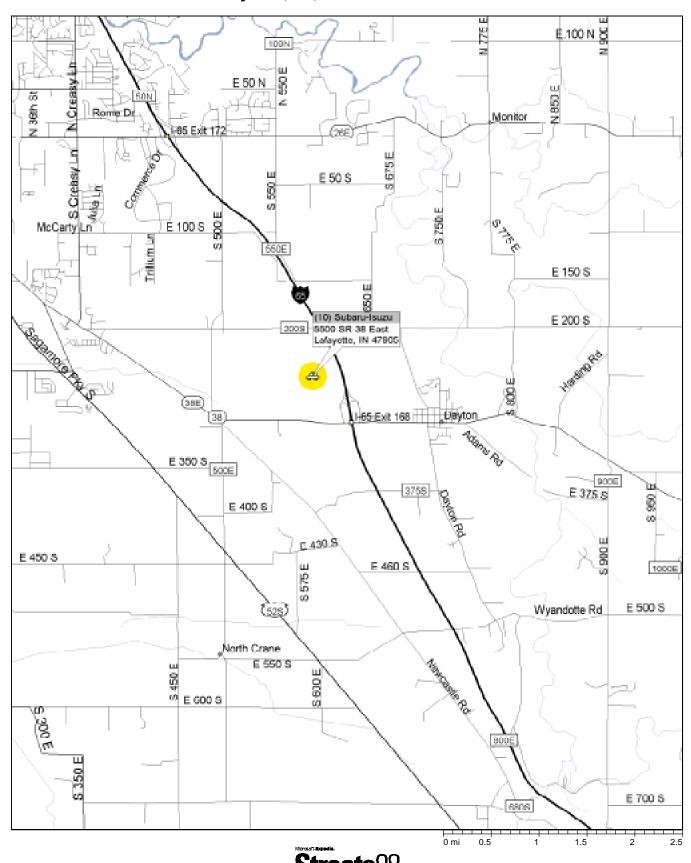
SO2 - attainment

<sup>\*</sup> no changes in designations occurred between 1994 and 1996

#### COMMUNITY DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

	Census Block	0-1 Mile	0-3 Miles	1-3 Miles	3-5 Miles	County	State	U.S.
Total Population (1994) Total Population (1990)	NA 1,271	NA 462	NA 5,337	NA 4,622	NA 30,013	134,428 130,598	5,752,151 5,544,159	260,340,990 248,709,873
% Change 1990-1994 Total Area (sq. mi.) (1990)	NA 8.4	NA 3.1	NA 28.2	NA 25.1	NA 50.2	3 499.8	4 35,870.1	5 3,536,278.1
Population/sq. mi. (land area) (1990)	151	149	189	184	598	261	155	70
Median Household Income (1994) Median Household Income (1989) % Change 1979-1989 (constant \$) % Change 1989-1994 (constant \$)						NA 27,630 <0.5 NA	27,858 28,797 -2 -3	32,264 30,056 7 7
Per Capita Personal Income (1993) Per Capita Personal Income (1989) % Change 1989-1993 (current \$)						17,936 14,472 24	19,213 15,972 20	20,800 17,690 18
Minority Percentage (1990) Pct. of Households Below Poverty Level (1989)	3 10	2 8	6 20	6 22	2 10	6 33	9 17	20 20
Pct. Not Completing High School (1990)	16	14	16	16	12	11	24	25
Total Employment (1994) (civilian nonfarm) Unemployment Rate (1994)						71,755 4	3,057,000 4	131,056,000 6
Manufacturing Employment (1993) Mfgr. as % Total Employment (1993) Manufacturing Employment (1992) Production Workers (1992) % Change in Mfgr. Employment 1987-1992 Assembly Plant as % Total Mfgr. Workers						15,051 3 NA NA NA 13	636,495 28 54,000 39,000 3	18,183,381 19 18,253,000 11,654,000 -4

## Lafayette, IN, Subaru-Isuzu Plant



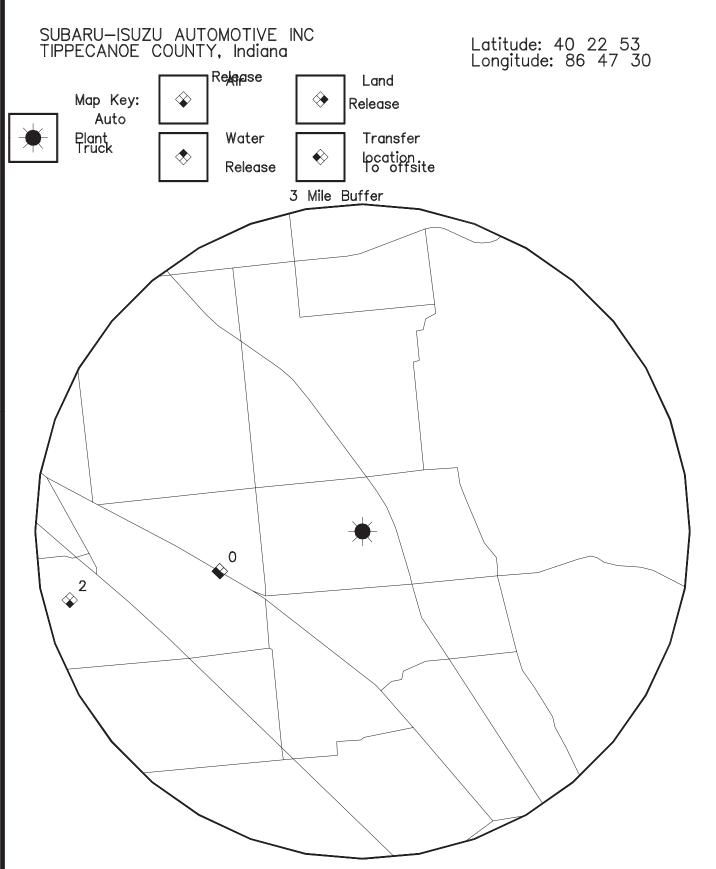
#### SUBARU-ISUZU AUTOMOTIVE INC 5500 SR 38 E

#### LAFAYETTE IN

Tri Number: 47903SBRSZ5500S

Map #	SIC Name	Address	City	State
				_
0	3711 SUBARU-ISUZU AUTOMOTIVE INC.	5500 STATE RD. 38 E. P.O. BOX 5689	LAFAYETTE	IN
2	2046 A. E. STALEY MFG. CO. LAFAYETTE SOUTH	3300 U.S. 52 S.	LAFAYETTE	IN

## AREA WIDE 1994 TRI EMISSION PROFILE



Number without a Symbol denotes no reported emissions over 0.5 pounds per year

Chemical Name	Air Fugitive (Non-Point Source) Emissions	Air Stack (Point Source) Emissions	Discharge to Surface Water	On-Site Land Disposal	TOTAL RELEASES	Discharge to POTW	Transfer	TOTAL TRANSFERS
				TON: MOTE	)			
SUBARU-ISUZU AUTOMOTIVE INC	· .		SIC DESCRIPT: SIC CODE: 3'		OR VEHICLES	& CAR BODIE	S MAP.	LOCATION NO:
5500 STATE RD. 38 E. P.O. B	OX 5689							
LAFAYETTE I	N 47905							
METHANOL	750	69,000	0	0	69,750	5	18,600	18,605
J-BUTYL ALCOHOL	1,400		0	0	141,400	5	50,000	
BENZENE	5	250	0	0	255	0	500	500
,1,1-TRICHLOROETHANE	250	5,500	0	0	5,750	0	19,000	19,000
METHYL ETHYL KETONE	250	2,000	0	0	2,250	5	19,700	•
,2,4-TRIMETHYLBENZENE	250	25,000	0	0	25,250	0	17,950	•
CTHYLBENZENE	250	,	0	0	11,250	0	8,350	•
STYRENE	5	250	0	0	255	0	500	
THYLENE GLYCOL	0	0	0	0	0	5	21,400	•
METHYL ISOBUTYL KETONE	1,500	150,000	0	0	151,500 89,750	5 0	153,950	•
COLUENE CYCLOHEXANE	750 5	89,000 250	0	0	255	0	19,100 500	•
YLENE (MIXED ISOMERS)	4,200		0	0	424,200	5	484,500	
METHYL TERT-BUTYL ETHER	4,200 5	250	0	0	255	0	1,000	•
HYDROCHLORIC ACID	5	0	0	0	5	0	10,750	•
PHOSPHORIC ACID	5	0	0	0	5	0	17,000	•
SULFURIC ACID	5	0	0	0	5	0	250	
BARIUM COMPOUNDS	0	1,500	0	0	1,500	250	500	
SLYCOL ETHERS	750	67,000	0	0	67,750	5	27,950	27,955
LEAD COMPOUNDS	5	0	0	0	5	250	1,500	1,750
MANGANESE COMPOUNDS	5	390	0	0	395	250	1,700	1,950
NICKEL COMPOUNDS	0	5	0	0	5	250	1,950	2,200
ZINC COMPOUNDS	0	250	0	0	250	5	15,800	15,805
SUBTO	TALS 10,395	981,645	0	0	992,040	1,040	892,450	893,490
A. E. STALEY MFG. CO. LAFAY	ETTE SOUTH		SIC DESCRIPT	ION: WET	CORN MILLIN	NG	MAP	LOCATION NO:
3300 U.S. 52 S.		S	SIC CODE: 20	046				
	N 47905							
HYDROCHLORIC ACID	10	, -	0	0	1,051	0	0	-
CHLORINE	5	0	0	0	5	0	0	0

